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OSMM&N File No. 211842US2PCT

Dept.: E/M

Serial No. 09/890,261

By: GJM/MEMO/rca

In the matter of the Application of: Thierry LIVACHE, et al.

For: METHOD FOR PRODUCING ADDRESSED LIGANDS MATRIXES ON A SUPPORT

**Due Date: N/A**

The following has been received in the U.S. Patent Office on the date stamped hereon:

- Dep. Acct. Order Form
- Cover Letter
- Petition Under 37 C.F.R. § 1.181
- Copy of Filing Receipt date-stamped October 29, 2001
- Copy of Information Disclosure Statement  Copy of PTO-1449
- Copy of Search Report International
- Copy of Search Report French
- Copies of Cited References 5

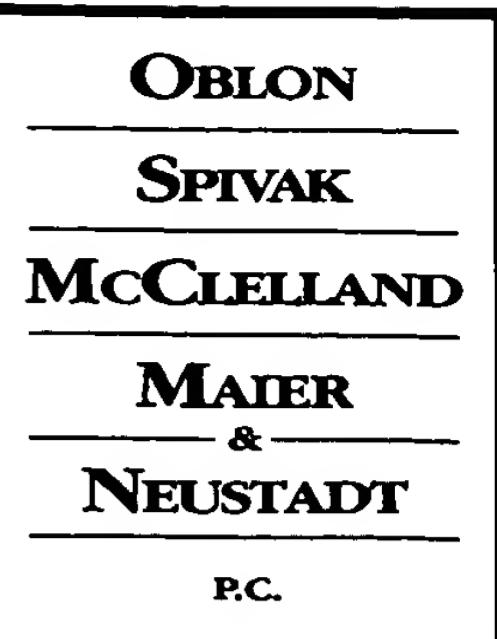


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Docket No.: 211842US2PCT



ATTORNEYS AT LAW

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

RE: Application Serial No.: 09/890,261

Applicants: Thierry LIVACHE, et al.

Filing Date: August 7, 2001

For: METHOD FOR PRODUCING ADDRESSED  
LIGANDS MATRIXES ON A SUPPORT

Group Art Unit: 1634

Examiner: Betty J. FORMAN

SIR:

Attached hereto for filing are the following papers:

**Petition Under 37 C.F.R. § 1.181; Copies of: Filing Receipt date-stamped October 29, 2001,  
Information Disclosure Statement, Form PTO-1449,**

**International Search Report, French Search Report, and Cited References (5).**

Our credit card payment form in the amount of \$0.00 is attached covering any required fees. In the event any variance exists between the amount enclosed and the Patent Office charges for filing the above-noted documents, including any fees required under 37 C.F.R. 1.136 for any necessary Extension of Time to make the filing of the attached documents timely, please charge or credit the difference to our Deposit Account No. 15-0030. Further, if these papers are not considered timely filed, then a petition is hereby made under 37 C.F.R. 1.136 for the necessary extension of time. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

---

Gregory J. Maier  
Registration No. 25,599

Michael E. Monaco  
Registration No. 52,041

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Customer Number

**22850**

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(703) 413-2220 (fax)

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DOCKET NO: 211842US2PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF

THIERRY LIVACHE, ET AL.

: EXAMINER: BETTY J. FORMAN

SERIAL NO: 09/890,261

:

FILED: AUGUST 7, 2001

: GROUP ART UNIT: 1634

FOR: METHOD FOR PRODUCING  
ADDRESSED LIGANDS MATRIXES ON  
A SUPPORT

:

PETITION UNDER 37 C.F.R. § 1.181

COMMISSIONER FOR PATENTS  
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants herein petition the Commissioner to invoke his supervisory authority to require the Examiner to consider the references cited in the Information Disclosure Statement filed on October 29, 2001.

MPEP § 609.II states the Examiner will consider the documents cited in the International Search Report when PCT/DO/EO/903 indicates both the search report and the copies of the documents are present in the national stage file. Thus, Applicants' Notification of Acceptance issued by the United States Patent and Trademark Office on September 17, 2001 indicates that the references cited on the International Search Report are in the national stage file per MPEP § 1893.03(g). Therefore, Applicants request the references cited in the International Search Report and filed via the Information Disclosure Statement of October 29, 2001 be considered by the Examiner. As a courtesy to the Examiner, a copy of the October 29, 2001 filing including copies of the relevant documents is provided herewith.

CONFIDENTIAL

Application No. 09/890,261  
Reply to Office Action of

Thus, per MPEP § 1893.03(g), copies of such reference need not be provided by the applicant.

Although Applicants do not believe that any fee is required for the present petition, any required fee should be charged the undersigned attorneys account no. 15-0030.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

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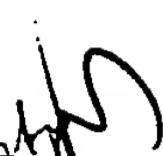
Gregory J. Maier  
Attorney of Record  
Registration No. 25,599

Michael E. Monaco  
Registration No. 52,041

I:\ATTY\MM\AMENDMENT\902\211842US PET 37 CFR 1.81.DOC

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OSMM&N File No. 211842US2PCT

Dept.: PP

Serial No. 09/890,261

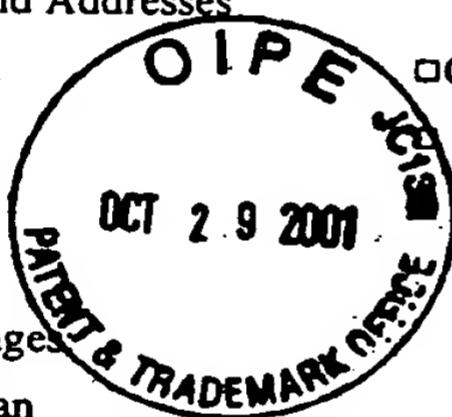
By: MJS/sdc

In the matter of the Application of: Thierry LIVACHE, et al.

For: METHOD FOR PRODUCING MATRICES OF ADDRESSED LIGANDS  
ON A CARRIER

The following has been received in the U.S. Patent Office on the date stamped hereon:

- pp. Specification & Claims/Drawings Sheets
- Combined Declaration, Petition & Power of Attorney pages
- List of Inventor Names and Addresses
- Utility Patent Application  CPA
- Notice of Priority  Priority Doc
- Check for  Dep. Acct. Order Form
- Fee Transmittal Form
- Assignment/PTO-1595 pages
- Letter to Official Draftsman
- Letter Requesting Approval of Drawing Changes
- Drawings sheets  Formal
- Letter
- Amendment
- Information Disclosure Statement  PTO-1449
- Cited References ( 7 )
- INTERNATIONAL and FRENCH Search Report (with English translation of category of cited documents)
- Statement of Relevancy
- IDS/Related/List of Related Cases  Cited Pending Applications ( )
- Restriction Response  Election Response
- Rule 132 Declaration
- Petition for Extension of Time
- Notice of Appeal
- Brief
- Issue Fee Transmittal
- White Advanced Serial Number Card



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JUN 03 2005  
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JC:25

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Thierry LIVACHE, et al.

SERIAL NO: 09/890,261

GAU: 1743

FILED: August 7, 2001

EXAMINER:

FOR: METHOD FOR PRODUCING MATRICES OF ADDRESSED LIGANDS ON A CARRIER

## INFORMATION DISCLOSURE/RELATED CASE STATEMENT UNDER 37 CFR 1.97

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Applicant(s) wish to disclose the following information.

## REFERENCES

- The applicant(s) wish to make of record the references, some of which are cited in the attached International and French Search Report listed on the attached form PTO-1449. Copies of reference(s) AA through AN, AT and AU, have been received by the U.S. PCT Receiving Office from the International Bureau as acknowledged in the Notification of Acceptance.
- A check is attached in the amount required under 37 CFR §1.17(p).

## RELATED CASES

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- A check is attached in the amount required under 37 CFR §1.17(p).

## CERTIFICATION

- Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

## DEPOSIT ACCOUNT

- Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

---

Marvin J. Spivak  
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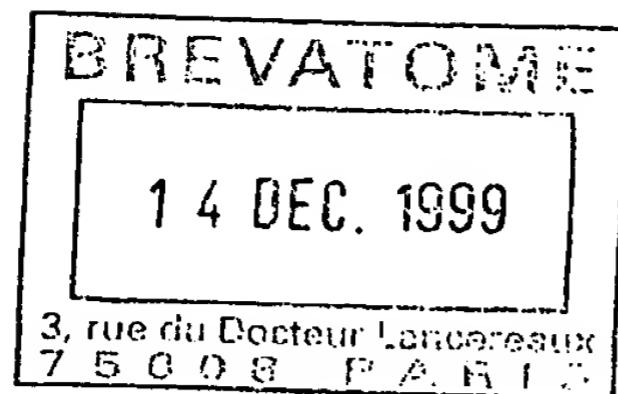
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JUN 03 2005  
U.S. PATENT & TRADEMARK OFFICE

Form PTO 1449 (Modified)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		PATENT DOCKET NO. 1842US2PCT		SERIAL NO. 09/890,261	
LIST OF REFERENCES CITED BY APPLICANT		APPLICANT		Thierry LIVACHE, et al.			
		FILING DATE		August 7, 2001		GROUP	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	5,486,337	01/23/96	T. OHKAWA			
	AB	5,828,133	10/27/98	P. CAILLAT, et al.			
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						
<b>FOREIGN PATENT DOCUMENTS</b>							
		DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION YES      NO		
	AL	WO 98/58745	12/30/98	WIPO			
	AM	WO 98/01221	01/15/98	WIPO			
	AN	WO 97/49987	12/31/97	WIPO			
	AO	2 319 838	06/03/98	GREAT BRITAIN			
	AP	WO 94/22889	10/13/94	WIPO (with English Abstract)			X
	AQ						
	AR						
	AS						
<b>OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)</b>							
	AT	T. LIVACHE, et al., Analytical Biochemistry, Vol. 255, pps. 188-194, "POLYPYRROLE DNA CHIP ON A SILICON DEVICE: EXAMPLE OF HEPATITIS C VIRUS GENOTYPING," 1998					
	AU	Patent Abstracts of Japan, JP 7-213926, August 15, 1995					
	AV	T. LIVACHE, et al., Biosensors & Bioelectronics, Vol. 13, pps. 629-634, "ELECTROCONDUCTING POLYMERS FOR THE CONSTRUCTION OF DNA OR PEPTIDE ARRAYS ON SILICON CHIPS," 1998					
	AW	S. P. A. FODOR, et al., Science, Vol. 251, pps. 767-773, "LIGHT-DIRECTED, SPATIALLY ADDRESSABLE PARALLEL CHEMICAL SYNTHESIS," February 1991					
	AX	K. R. KHRAPKO, et al., J. DNA Sequencing and Mapping, Vol. 1, pps. 375-388, "A METHOD FOR DNA SEQUENCING BY HYBRIDIZATION WITH OLIGONUCLEOTIDE MATRIX," 1991					
	AY	T. LIVACHE, et al., Nucleic Acids Research, Vol. 22, No. 15, pps. 2915-2921, "PREPARATION OF A DNA MATRIX VIA AN ELECTROCHEMICALLY DIRECTED COPOLYMERIZATION OF PYRROLE AND OLIGONUCLEOTIDES BEARING A PYRROLE GROUP," 1994					
	AZ	S. A. EMR, et al., Electroanalysis, Vol. 7, No. 10, pps. 912-923, "USE OF ENZYME-ALMS IN AMPEROMETRIC BIOSENSORS," 1995					
Examiner				Date Considered			
<p>*Examiner: Initial if reference is considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>							

COPY



DEMANDE DE : BREVET  
NO : 9901438000 DU 08/02/99  
V/REF. : B13204/MDT98.16

## BREVATOME

3 RUE DU DOCTEUR LANCEREAUX  
75008 PARIS

PARIS, LE 10 DECEMBRE 1999

: NOTIFICATION D'UN RAPPORT DE RECHERCHE PRELIMINAIRE  
AVEC REPONSE OBLIGATOIRE

Messieurs,

J'ai l'honneur de vous adresser, en annexe, le rapport de recherche préliminaire établi conformément à l'article R.612-57 du code de la propriété intellectuelle, citant les documents qui peuvent être pris en considération pour apprécier la nouveauté et l'activité inventive de l'invention, objet de votre demande.

Selon l'article R.612-59 du code précité, vous disposez d'un délai de **3 mois** à compter de la date de réception de ce rapport de recherche préliminaire pour y répondre par écrit. Avant l'expiration de ce délai, celui-ci peut être renouvelé une fois sur votre requête.

Suivant la catégorie des documents cités, vous pouvez être tenu à une obligation de réponse (par exemple, si le rapport de recherche préliminaire mentionne des documents de catégorie **X ou Y**). Dans ce cas, un papillon **rouge** est apposé sur cette lettre et le défaut de réponse entraînera le rejet de la demande. Dans le cas contraire, ce papillon est **jaune**.

Dans tous les cas, il est de votre intérêt en élaborant votre réponse, de tenir compte de tous les documents cités.

Selon les articles R.612-58 et R.612-60 du code précité, votre réponse peut consister :

- soit en de nouvelles revendications (en 3 exemplaires). Dans ce cas, vous devez signaler les changements apportés aux revendications initiales. Vous pouvez y joindre des observations qui mettent en évidence les caractéristiques techniques de ces nouvelles revendications qui échappent à l'opposabilité des antériorités citées.

- soit seulement en des observations qui ont alors pour objet de discuter l'opposabilité des antériorités citées.

Veuillez agréer l'expression de ma considération distinguée.

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Pour le Directeur général de l'Institut national  
de la propriété industrielle

*Le Chef du département des brevets*

**Martine PLANCHE**

INSTITUT  
NATIONAL DE  
LA PROPRIETE  
INDUSTRIELLE

SIEGE  
26 bis, rue de Saint Petersbourg  
75800 PARIS cedex 08  
Téléphone : 01 53 04 53 04  
Télécopie : 01 42 93 59 30

Translation of Category of Cited Documents in the attached foreign language Search Report:

- X: particularly relevant if taken alone
- Y: particularly relevant if combined with another document of the same category
- A: relevant to at least one claim or as technological background
- O: non-written disclosure
- P: intermediate document
- T: theory or principle underlying the invention
- E: document entitled to a date prior to the filing date but which was not published until the filing date or a later date
- D: document cited in the application
- L: document cited for other reasons

---

- &: member of the same patent family, corresponding document

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## **DOCUMENTS CONSIDERES COMME PERTINENTS**

DOCUMENTS CONSIDERES COMME PERTINENTS		Revendications concernées de la demande examinée
Catégorie	Citation du document avec indication, en cas de besoin, des parties pertinentes	
X	WO 98 58745 A (NEW YORK UNIVERSITY) 30 décembre 1998 (1998-12-30)  * abrégé * * page 1, ligne 10 - ligne 14 * * page 6, ligne 17 - page 7, ligne 5 * * page 12, ligne 2 - ligne 33 * * revendications; figures 1-9 *	1-3, 5, 6, 8, 9, 17-19
A	---	4, 7, 10-16, 20
A	US 5 486 337 A (TIHITO OHKAWA) 23 janvier 1996 (1996-01-23) * 1e document en entier * ---	1-20
A	WO 98 01221 A (COMBIMATRIX CORPORATION) 15 janvier 1998 (1998-01-15) * abrégé; revendications * ---	1-20
A	THIERRY LIVACHE ET AL.: "Polypyrole DNA Chip on a Silicon Device: Example of Hepatitis C Virus Genotyping" ANALYTICAL BIOCHEMISTRY., vol. 255, 1998, pages 188-194, XP002114813 ACADEMIC PRESS INC. NEW YORK., US ISSN: 0003-2697 * 1e document en entier * ---	1-20  DOMAINES TECHNIQUES RECHERCHES (Int.CL.6) B01J
A	US 5 828 133 A (PATRICE CAILLAT & CLAUDE MASSIT) 27 octobre 1998 (1998-10-27) * abrégé *	1-20
A	WO 97 49987 A (CELLSTAT TECHNOLOGIES) 31 décembre 1997 (1997-12-31) * abrégé *	---
		-/-
Date d'achèvement de la recherche		Examinateur
26 novembre 1999		Stevnsborg, N

RAPPORT DE RECHERCHE  
PRELIMINAIREN° d'enregistrement  
nationalétabli sur la base des dernières revendications  
déposées avant le commencement de la rechercheFA 571692  
FR 9901438

DOCUMENTS CONSIDERES COMME PERTINENTS		Revendications concernées de la demande examinée
Catégorie	Citation du document avec indication, en cas de besoin, des parties pertinentes	
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11, 26 décembre 1995 (1995-12-26) -& JP 07 213926 A (HITACHI KOKI CO. LTD.), 15 août 1995 (1995-08-15) * abrégé; figures * -& DATABASE WPI Section Ch, Week 199541 Derwent Publications Ltd., London, GB; Class J04, AN 1995-316145 XP002124060 & JP 07 213926 A (HITACHI KOKI K.K.), 15 août 1995 (1995-08-15) * abrégé * -----	1
		DOMAINES TECHNIQUES RECHERCHES (Int.CL.6)
1	Date d'achèvement de la recherche 26 novembre 1999	Examinateur Stevnsborg, N
<b>CATEGORIE DES DOCUMENTS CITES</b> X : particulièrement pertinent à lui seul Y : particulièrement pertinent en combinaison avec un autre document de la même catégorie A : pertinent à l'encontre d'au moins une revendication ou arrière-plan technologique général O : divulgation non-écrite P : document intercalaire		
T : théorie ou principe à la base de l'invention E : document de brevet bénéficiant d'une date antérieure à la date de dépôt et qui n'a été publié qu'à cette date de dépôt ou qu'à une date postérieure. D : cité dans la demande L : cité pour d'autres raisons & : membre de la même famille, document correspondant		

ANNEXE AU RAPPORT DE RECHERCHE PRELIMINAIRE  
RELATIF A LA DEMANDE DE BREVET FRANÇAIS NO.

FA 571692  
FR 9901438

La présente annexe indique les membres de la famille de brevets relatifs aux documents brevets cités dans le rapport de recherche préliminaire visé ci-dessus.

Lesdits membres sont contenus au fichier informatique de l'Office européen des brevets à la date du

Les renseignements fournis sont donnés à titre indicatif et n'engagent pas la responsabilité de l'Office européen des brevets, ni de l'Administration française

26-11-1999

Document brevet cité au rapport de recherche	Date de publication	Membre(s) de la famille de brevet(s)		Date de publication
WO 9858745 A	30-12-1998	AU	8074398 A	04-01-1999
US 5486337 A	23-01-1996		AUCUN	
WO 9801221 A	15-01-1998	AU	3588497 A	02-02-1998
		CA	2259523 A	15-01-1998
		EP	0910467 A	28-04-1999
		ZA	9705891 A	23-07-1998
US 5828133 A	27-10-1998	FR	2742452 A	20-06-1997
		EP	0780890 A	25-06-1997
		JP	9195094 A	29-07-1997
WO 9749987 A	31-12-1997	AU	3508197 A	14-01-1998
		CA	2258279 A	31-12-1997
		EP	0950184 A	20-10-1999
JP 07213926 A	15-08-1995		AUCUN	

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## INTERNATIONAL SEARCH REPORT

Inte onal Application No

PCT/FR 00/00289

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B01J19/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, COMPENDEX, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98 58745 A (NEW YORK UNIVERSITY) 30 December 1998 (1998-12-30) abstract page 1, line 10 - line 14 page 6, line 17 -page 7, line 5 page 12, line 2 - line 33 claims; figures 1-9 ---	1-19
A	US 5 486 337 A (TIHITO OHKAWA) 23 January 1996 (1996-01-23) the whole document ---	1-19
A	WO 98 01221 A (COMBIMATRIX CORPORATION) 15 January 1998 (1998-01-15) abstract; claims ---	1-19



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

## \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

15 June 2000

Date of mailing of the international search report

27/06/2000

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl.  
Fax: (+31-70) 340-3016

Authorized officer

Stevnsborg, N

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR 00/00289

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	THIERRY LIVACHE ET AL.: "Polypyrole DNA Chip on a Silicon Device: Example of Hepatitis C Virus Genotyping" ANALYTICAL BIOCHEMISTRY., vol. 255, 1998, pages 188-194, XP002114813 ACADEMIC PRESS INC. NEW YORK., US ISSN: 0003-2697 the whole document -----	1-19
A	US 5 828 133 A (PATRICE CAILLAT & CLAUDE MASSIT) 27 October 1998 (1998-10-27) abstract -----	1-19
A	WO 97 49987 A (CELLSTAT TECHNOLOGIES) 31 December 1997 (1997-12-31) abstract -----	
A	PATENT ABSTRACTS OF JAPAN vol. 1995, no. 11, 26 December 1995 (1995-12-26) -& JP 07 213926 A (HITACHI KOKI CO. LTD.), 15 August 1995 (1995-08-15) abstract; figures -& DATABASE WPI Section Ch, Week 199541 Derwent Publications Ltd., London, GB; Class J04, AN 1995-316145 XP002124060 & JP 07 213926 A (HITACHI KOKI K.K.), 15 August 1995 (1995-08-15) abstract -----	1

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR 00/00289

Patent document cited in search report	Publication date	Patent family member(s)			Publication date
WO 9858745 A	30-12-1998	AU	8074398 A		04-01-1999
		EP	0988112 A		29-03-2000
US 5486337 A	23-01-1996		NONE		
WO 9801221 A	15-01-1998	AU	3588497 A		02-02-1998
		CA	2259523 A		15-01-1998
		EP	0910467 A		28-04-1999
		ZA	9705891 A		23-07-1998
US 5828133 A	27-10-1998	FR	2742452 A		20-06-1997
		EP	0780890 A		25-06-1997
		JP	9195094 A		29-07-1997
WO 9749987 A	31-12-1997	AU	3508197 A		14-01-1998
		CA	2258279 A		31-12-1997
		EP	0950184 A		20-10-1999
JP 07213926 A	15-08-1995		NONE		

